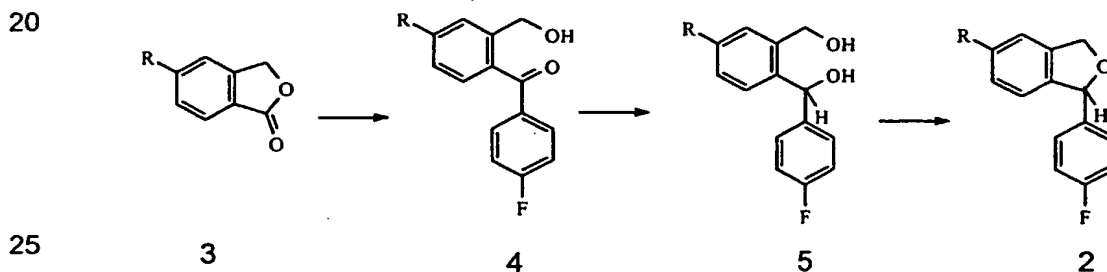


Claims:

1. A process for the preparation of a 5-substituted-1-(4-fluorophenyl)-1,3-dihydro-isobenzofuran of Formula 2, an intermediate for the manufacture of citalopram, which process comprises:
- (a) carrying out a Grignard reaction on a corresponding 5-substituted phthalide of Formula 3 in a co-solvent system, comprising adding (i) prepared 4-fluorophenyl magnesium halide in an ether solvent to (ii) the 5-substituted phthalide in a suitable organic co-solvent to the ether solvent, to form a corresponding 4-substituted-2-hydroxymethyl-4'-fluorobenzophenone of Formula 4,
 - (b) carrying out a ketone reduction of the 4-substituted-2-hydroxymethyl-4'-fluorobenzophenone of Formula 4 following the Grignard reaction, to form a corresponding 4-substituted-2-hydroxymethylphenyl-1-(4-fluorophenyl) methanol of Formula 5, and
 - (c) carrying out a cyclisation reaction on the 4-substituted-2-hydroxymethylphenyl-1-(4-fluorophenyl) methanol of Formula 5 following the reduction reaction, to form said intermediate of Formula 2:



wherein R represents Br or CN.

2. A process according to claim 1, wherein the co-solvent is an aliphatic or aromatic chlorinated solvent or an aromatic hydrocarbon.
3. A process according to claim 2, wherein the co-solvent is an aliphatic or aromatic chlorinated solvent selected from methylene dichloride, ethylene dichloride, trichloroethane, carbon tetrachloride, chloroform, chlorobenzene, dichlorobenzene, and mixtures thereof.

4. A process according to claim 3, wherein the co-solvent is methylene dichloride or chloroform.
5. A process according to claim 2, wherein the co-solvent is an aromatic hydrocarbon selected from toluene, benzene, xylene, and mixtures thereof.
6. A process according to any of the preceding claims, wherein the ether solvent and co-solvent are both dry.
7. A process according to any of the preceding claims, wherein the volumetric ratio of ether solvent to co-solvent is between 3 : 10 and 6 : 7.
8. A process according to any of the preceding claims, wherein the ether solvent is 1,4-dioxane, diethylether, dimethoxyethane or tetrahydrofuran (THF).
9. A process according to any of the preceding claims, wherein in the ketone reduction step (b), 0.25 to 1.0 molar equivalents of sodium borohydride are used as reducing agent.
10. A process according to claim 9, wherein in the ketone reduction step (b), 0.5 molar equivalents of sodium borohydride are used.
11. A process according to any of the preceding claims, wherein the cyclisation reaction (c) comprises the use of concentrated hydrochloric acid or an organic acid selected from methanesulfonic acid, benzenesulfonic acid and para-toluene sulfonic acid (PTSA).
12. A process according to claim 11, wherein the acid is used in a catalytic amount.
13. A process according to claim 12, wherein the acid is PTSA in a catalytic amount of 5 to 10% w/w with respect to the 5-substituted phthalide.
14. A process according to any of the preceding claims, wherein the Grignard reaction (a) is carried out at a temperature of from -6°C to -2°C.

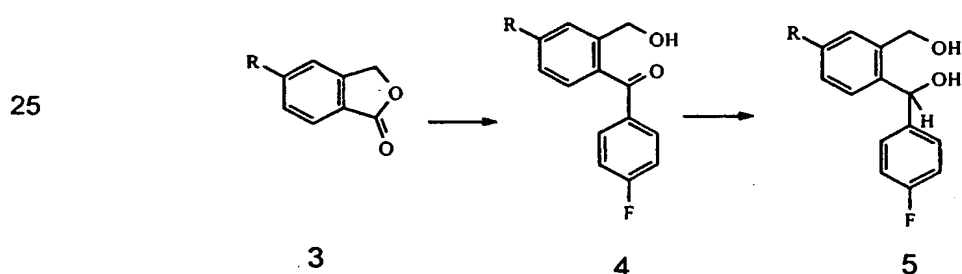
15. A process according to any of the preceding claims, wherein in the Grignard reaction (a), the molar ratio of 4-fluorophenyl magnesium halide to 5-substituted phthalide is 1 : 1 to 1.4 : 1.

5 16. A process according to any of the preceding claims, wherein the entire process, comprising Grignard reaction (a), reduction reaction (b) and cyclisation reaction (c), is carried out in a reaction vessel without isolation of intermediates from solution.

10 17. A process for preparation of 4-bromo-2-hydroxymethylphenyl-1-(4-fluorophenyl) methanol or 4-cyano-2-hydroxymethylphenyl-1-(4-fluorophenyl) methanol of Formula 5, which process comprises:

15 (a) carrying out a Grignard reaction on a corresponding 5-substituted phthalide of Formula 3 in a co-solvent system, comprising adding (i) prepared 4-fluorophenyl magnesium halide in an ether solvent to (ii) the 5-substituted phthalide in a suitable organic co-solvent to the ether solvent, to form a corresponding 4-substituted-2-hydroxymethyl-4'-fluorobenzophenone of Formula 4, and

20 (b) carrying out a ketone reduction of the 4-substituted-2-hydroxymethyl-4'-fluorobenzophenone of Formula 4 with sodium borohydride, to form 4-bromo-2-hydroxymethylphenyl-1-(4-fluorophenyl) methanol or 4-cyano-2-hydroxymethylphenyl-1-(4-fluorophenyl) methanol of Formula 5:



30

wherein R represents Br or CN.